

Substitute Form PTO-1449

U.S. Department of Commerce  
Patent and Trademark OfficeAttorney's Docket No.  
14414-025001Application No.  
10/775,836**Information Disclosure Statement  
by Applicant**

(Use several sheets if necessary)

Applicant  
Diyun Huang et al.Filing Date  
February 10, 2004Group Art Unit  
1626

(37 CFR § 1.96(b))

**U.S. Patent Documents**

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
DL	1	4,421,761	12-1983	Nagai et al.			
DL	2	5,080,991	01-1992	Ono et al.			
DL	3	5,290,630	03-1994	Devonald et al.			
DL	4	5,670,091	09-1997	Marder			
DL	5	5,679,763	10-1997	Jen			
DL	6	5,696,243	12-1997	Beckmann et al.			
DL	7	5,783,649	07-1998	Beckmann et al.			
DL	8	5,834,575	11-1998	Honda et al.			
DL	9	6,090,332	07-2000	Marder			
DL	10	6,130,339	10-2000	Tan et al.			
DL	11	6,197,921	03-2001	Tan et al.			

**Foreign Patent Documents or Published Foreign Patent Applications**

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
DL	12	195 32 828	03-1996	DE			Abst.	
DL	13	44 01 911	08-1995	DE			Abst.	
DL	14	44 16 476	11-1995	DE			Abst.	
DL	15	0 414 185	02-1991	EP				X
DL	16	0 637 774	02-1995	EP				X
DL	17	0 729 056	08-1996	EP				X
DL	18	0 754 709	01-1997	EP			Abst.	
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DL	20	2000-089268	03-2000	JP			Abst.	
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DL	24	3-31850	02-1991	JP				

Examiner Signature

/Deborah Lambkin/

Date Considered

11/27/2006

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Substitute Disclosure Form (PTO-1449)

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Foreign Patent Documents or Published Foreign Patent Applications								
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							Yes	No
DL	25	WO 01/53746	07-2001	WIPO				
DL	26	WO 01/96409	12-2001	WIPO				

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
DL	27	Kaneko et al., CA131: 20257, 1999
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DL	33	Das et al., CA132: 42429, 1999
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DL	36	Dini and Aszodi, "Synthesis of a Dihydroxythiophene Analogue of Catechospirines," <u>Bioorganic &amp; Medicinal Chemistry Letters</u> , 2000, 10:349-352
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Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
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DL	50	Ng et al., "The Synthesis and Characterisation of Fluorescent Poly(heteroaromatic oxadiazole(s)," <u>Macromolecular Chemistry and Physics</u> , 2001, 202(1):8-13
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DL	56	Rangnekar and Mavlankar, "Synthesis of Novel c-Hetero-fused Thiophene Derivatives," <u>Journal of Heterocyclic Chemistry</u> , 1991, 28(5):1449-1451
DL	57	Reinhardt et al., "Optical Power Limiting in Solution Via Two-Photon Absorption: New Aromatic Heterocyclic Dyes with Greatly Improved Performance," <u>Proc. SPIE</u> , 1997, 3146, pp. 2-11
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DL	60	Turbiez et al., "Mixed $\pi$ -conjugated oligomers of thiophene and 3,4-ethylenedioxythiophene (EDOT)," <u>Tet. Lett.</u> , 2000, 41:5521-5525
DL	61	Unrow and Reinhardt, "Synthesis of substituted thiophene-benobisthiazole oligomers for molecular weight-third order NLO property correlations," <u>Proc. SPIE</u> , 1992, 1626:450-459
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DL	63	Wu et al., "Highly efficient, thermally and chemically stable nonlinear optical chromophores based on the $\alpha$ -perfluoroaryldicyanovinyl electron acceptors," <u>Chem. Commun.</u> , 1999, pp.2391-2392

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DL	65	Lee et al., "Optical Intensity Modulator Based on a Novel Electrooptic Polymer Incorporating a High $\mu\text{B}$ Chromophore," <u>IEEE J. of Quantum Electronics</u> , 2000, 36(5):527-532
DL	66	Shi et al., "Low (Sub-1-Volt) Halfwave Voltage Polymeric Electro-optic Modulators Achieved by Controlling Chromophore Shape," <u>Science</u> , 2000, 288:119-122
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DL	68	Chemical Abstracts Registry Database (American Chemical Society), Registry No. 501910-13-0, April 2003
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DL	72	Dalton et al., "Polymeric Electro-optic Modulators: From Chromophore Design to Integration with Semiconductor Very Large Scale Integration Electronics and Silica Fiber Optics," <u>Ind. Eng. Chem. Res.</u> , 1999, 38:8-33
DL	73	Kim et al., "Nonlinear optical chromophores containing dithienothiophene as a new type of electron relay," <u>J. Mater. Chem.</u> , 1999, 9:2227-2232
DL	74	Kojima et al., "Facile Synthesis of Thiophene Derivatives Using a Cyclopropenyl Cation," <u>Synthesis</u> , 1996, 10:1193-1195
DL	75	Raimundo et al., "Huge enhancement of the quadratic nonlinear optical susceptibility in push-pull chromophores based on bridged dithienylethylene spacers," <u>Chem. Commun.</u> , 2000, 17:1597-1598
DL	76	Raimundo et al., "Push-pull chromophores based on 2,2'-bi(3,4-ethylenedioxythiophene) (BEDOT) $\pi$ -conjugating spacer," <u>Tetrahedron Letters</u> , 2001, 42:1507-1510
DL	77	Reinhardt et al., "Highly Active Two-Photon Dyes: Design, Synthesis, and Characterization toward Application," <u>Chem. Mater.</u> , 1998, 10:1863-1874

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